

Work Order ID 130787

Wednesday, March 25, 2015 11:31:30 AM

130787

Page 1

Item ID: D5116-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Wiring Harness
Start Date: 3/25/2015 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 3/25/2015 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: MLS Date: 150325 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D5116	B								

100

0.00

100

Purchasing

Purchasing

Memo

ISSUE PO: 27893

Supplier: Posttronics

Manufacture D5116-041 as per dwg

C OF C IS REQUIRED

0.00

CL 15/03/25 10

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

0.00

10x 15-05-6

8

120

QC5- Inspect part completeness to step on W/O

0.00

120

QC

Quality Control

Memo

0.00

(10)

DAS
38

MAY 08 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Page 2

Item ID: D5116-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Wiring Harness
Start Date: 3/25/2015 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 3/25/2015 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>st213</u>	0.00							
130									
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

DAG
27
9-29
MAY 11 2015

MLS MAY 12 2015

MLS MAY 12 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
		☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

Picklist Print

Wednesday, March 25, 2015 11:31:33 AM

Page 1

Work Order ID: 130787

130787

Parent Item: D5116-041

D5116-041

Parent Item Name: Wiring Harness

Start Date: 3/25/2015

Required Date: 3/25/2015

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 14.11.17 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D5116-041P		Purchased		No			Each	0.0000		10			
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D5116-041P

Wiring Harness

10x SP 15-05-6.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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D5116-041 WIRE HARNESS

QTY -041	PART NUMBER	DESCRIPTION	WIRE CODE	GAUGE	TERMINAL 1	TERMINAL 2	LENGTH (IN)	NOTES
X	D5116-041	WIRE HARNESS	N/A	N/A	N/A	N/A	N/A	N/A
1	D5116-1	WIRE M22759/41-14-9	M001A14	14	NONE	M39029/92-535	48	
1	D5116-3	WIRE M22759/41-14-9	M001B14	14	M39029/92-535	60619-1	48	
1	D5116-5	WIRE M22759/41-14-9	M001C14	14	60620-1	320562	48	WIRE/CONNECTOR SUPPLIED WITH HOOK
1	D5116-7	WIRE M22759/41-14-9	M002A14	14	60620-1	320562	48	WIRE/CONNECTOR SUPPLIED WITH HOOK
1	D5116-9	WIRE M22759/41-14-9	M002B14N	14	60619-1	NONE	72	
1	D5116-11	WIRE M22759/41-20-9	M003A20	20	NONE	M39029/92-533	48	
1	D5116-13	WIRE M22759/41-20-9	M003B20	20	M39020/92-533	60619-1	12	
1	D5116-15	WIRE M22759/32-20-9	M003C20	20	60620-1	NONE	75	
1	D5116-17	WIRE M22759/32-20-9	M004A20	20	60620-1	NONE	75	
1	D5116-19	WIRE M22759/41-20-9	M004B20N	20	60619-1	NONE	30	
1	D5116-21	WIRE M22759/41-20-9	NO CODE	20	36152	640903-1	7	JUMPER WIRE BETWEEN 28 VDC BUS AND D5095-1 FUSE HOLDER
1	XPF-1/8	EXPANDABLE SLEEVE	N/A	N/A	N/A	N/A	44	TO BE INSTALLED OVER WIRES M001C14 AND M002A14
2	1-480318	CONNECTOR	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9
2	1-480319	CONNECTOR	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9
1	31890	RED # 8 RING TERMINAL	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9
2	320562	BLUE BUTT SPLICE	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9
1	320565	BLUE # 8 RING TERMINAL	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9
1	320619	BLUE # 6 RING TERMINAL	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9
1	640903-1	1/4" BLADE CONNECTOR	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9

RELEASED

2015 FEB 23

SCN 15-527

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER QSI 044 6.7
- 7) WEIGHT: 1.0 lbs
- 8) PACKAGE TERMINALS/CONNECTORS IN LABELLED BAGS AS PART OF THE HARNESS ASSEMBLY
- 9) TERMINALS ARE TO BE CRIMPED BY THE CUSTOMER DURING HARNESS INSTALLATION
- 10) INSTALL AND SHRINK A 2" LENGTH OF 1/4" HEAT-SHRINK TUBING OVER BOTH ENDS OF THE EXPANDABLE SLEEVE TO PREVENT THE EXPANDABLE SLEEVE FROM FRAYING

130787 ML5
1503-25

APPROVED

B	REVISED D5116-5/-7 (TERMINAL 2 WAS 32448) (ZN C4-1).	AK	15.02.06
A	NEW ISSUE	ML	14.05.09
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE LTD	
DRAWN	AK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	CC	DRAWING NO.	REV. B
MFG. APPR.	DD	D5116	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	WIRE HARNESS	NTS
DATE	15.02.06	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO27893**

Purchase Order Date 3/25/2015

PO Print Date 3/25/2015

Page Number 1 of 2

Order From : VU-EAG002

EAGLE COPTERS MAINTENANCE LTD.
823 MCTAVISH ROAD N E
CALGARY, AB T2E 7G9
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	403-250-7370	Customer POID	
Ship To Contact		Customer Tax #	10127-2607
Ship To Phone		Terms	Net 30
Ship Via:	FedEx Overnight collect	Currency	USD
Ship Acct:		FOB	Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D5116-041P AS PER DWG D5116 REV. B B130787	Wiring Harness	4/2/2015 Yes 4/2/2015	FN	10.00 Each	\$284.88	\$2,848.80
Line Total:							\$2,848.80
2	71401-45	PROCUREMENT QUALITY CLAUSES	5/21/2015 No 5/21/2015		1.00	\$0.00	\$0.00
Procurement Quality Clauses A005 RIGHT OF ENTRY A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE) A016 PERSONNEL QUALIFICATION A018 ELECTRICAL EQUIPMENT A025 CERTIFICATE OF CONFORMANCE A040 NOTIFICATION OF QUALITY ESCAPE A041 QUALITY MANAGEMENT SYSTEM A042 DART NOTIFICATION BY SUPPLIER A043 RETENTION OF QUALITY DOCUMENTS							

Note:

3/25/2015



823 McTavish Road N.E.
Calgary, AB Canada
T2E 7G9
403-250-7370 1-800-564-6469
www.eaglecopters.com

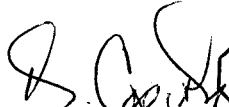
MANUFACTURING – RELEASE NOTE

Customer: Dart Aerospace
Customer Order #: _____
Shipped To: Dart Aerospace
1270 Aberdeen Street
Hawkesbury, ON

Release Note #: 2015-004
ECML Order #: _____
Date: May 5th, 2015
Packing Slip #: N/A

ITEM	PART NUMBER	DESCRIPTION	SERIAL NUMBER	ECML REFERENCE	WAIVERS	QUANTITY
1	D5116-041P ✓	Wiring Harness	N/A	M150075	N/A	10
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

I certify that the aeronautical product described thereon conforms to the requirements of the approved design date and is in a condition for safe operation.


Quality Assurance

5th May 2015
Date

D5116-041 WIRE HARNESS

QTY - 041	PART NUMBER	DESCRIPTION	WIRE CODE	GAUGE	TERMINAL 1	TERMINAL 2	LENGTH (IN)	NOTES
X	D5116-041	WIRE HARNESS	N/A	N/A	N/A	N/A	N/A	N/A
1	D5116-1	WIRE M22759/41-14-9	M001A14	14	NONE	M39029/92-535	48	
1	D5116-3	WIRE M22759/41-14-9	M001B14	14	M39029/92-535	60619-1	48	
1	D5116-5	WIRE M22759/41-14-9	M001C14	14	60620-1	320562	48	WIRE/CONNECTOR SUPPLIED WITH HOOK
1	D5116-7	WIRE M22759/41-14-9	M002A14	14	60620-1	320562	48	WIRE/CONNECTOR SUPPLIED WITH HOOK
1	D5116-9	WIRE M22759/41-14-9	M002B14N	14	60619-1	NONE	72	
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1	D5116-15	WIRE M22759/32-20-9	M003C20	20	60620-1	NONE	75	
1	D5116-17	WIRE M22759/32-20-9	M004A20	20	60620-1	NONE	75	
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2	320562	BLUE BUTT SPLICE	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9
1	320565	BLUE # 8 RING TERMINAL	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9
1	320619	BLUE # 6 RING TERMINAL	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9
1	640903-1	1/4" BLADE CONNECTOR	N/A	N/A	N/A	N/A	N/A	SEE NOTE 8 AND 9

RELEASED

2015 FEB 23

SCN 15-523

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER QSI 044 6.7
- 7) WEIGHT: 1.0 lbs
- 8) PACKAGE TERMINALS/CONNECTORS IN LABELLED BAGS AS PART OF THE HARNESS ASSEMBLY
- 9) TERMINALS ARE TO BE CRIMPED BY THE CUSTOMER DURING HARNESS INSTALLATION
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B	REVISED D5116-5/7 (TERMINAL 2 WAS 32448) (ZN C4-1)	AK	15.02.06
A	NEW ISSUE	ML	14.05.09
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	CC	DRAWING NO.	REV. B
MFG. APPR.	DD	D5116	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	WIRE HARNESS	NTS
DATE	15.02.06	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

APPROVED